Page 5 Dkt: 303.928US5

REMARKS

This paper responds to the Office Action mailed on May 16, 2006.

Claims 36 and 41 are amended; as a result, claims 36-41 are now pending in this application.

In the Specification

The specification is amended to update the status of the patent application from which the instant application claims priority. No new matter is introduced.

§102 Rejection of the Claims

Claims 36, 37 and 39 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 4,611,553 to Iwata *et al.* ("Iwata"). Claims 38, 39 and 41 were further rejected under 35 U.S.C. § 102(b) as anticipated by JP 03-263343 to Masahiko ("Masahiko"). Applicant disagrees with the stated grounds of rejection and desires to further clarify various distinctions of the present invention over the cited art. Reconsideration of the present application is therefore requested in light of the present amendment and following remarks.

As a preliminary matter, Applicant thanks Examiner MacArthur for granting a telephonic interview on September 6, 2006. During this interview, Examiner MacArthur and the undersigned attorney discussed the teachings in the applied art, and also discussed possible claim amendments.

The Examiner has cited the Iwata reference as pertinent. Iwata discloses a suction nozzle apparatus that is configured to remove a raised edge portion of a coating material that is applied to a flexible substrate material, such as a photographic film, a pre-sensitized plate or magnetic tape. With reference to Figure 2 of the Iwata reference, the suction nozzle 4 is a dual pipe structure having a cleaning liquid jetting outlet 5 and a cleaning liquid sucking inlet 6 positioned at an end of the suction nozzle 4. (Col. 2, lines 23-26). The jetting outlet 5 is offset relative to a longitudinal axis 7 of the nozzle 4, while the sucking inlet 6 is located on the longitudinal axis 7 of the nozzle 4. In Figure 2, a cleaning liquid supply port 8 is provided, which is oriented along an axis that is perpendicular to the longitudinal axis 7. (Col. 2, lines 27-32). The structure of the

Serial Number: 09/652,713

Filing Date: August 31, 2000

Title: CHEMICAL DISPENSING SYSTEM FOR SEMICONDUCTOR WAFER PROCESSING

Page 6 Dkt: 303.928US5

disclosed nozzle 4 is calculated to generate an eddy stream of the cleaning fluid to clean the sucking inlet 6 without fouling other portions of the nozzle 4. (Col. 2, lines 44-55).

In the present action, the Examiner urges a correspondence between the dispenser and the splash controller disclosed in the present application, and the cleaning liquid supply port 8 and the nozzle 4 of Iwata, respectively. With reference now to the present application, and in particular to Figure 1, Applicant emphasizes that the disclosed splash controller 18 and the dispenser 16 are *concentrically arranged*, as shown therein. In contrast, and as described more fully above, the Iwata reference teaches that the jetting outlet 5 is *offset* relative to a longitudinal axis 7 of the nozzle 4, and further that the cleaning liquid supply port 8 is, in fact, *perpendicular* to the longitudinal axis of the nozzle 4. In either case, the Iwata reference fails to teach a concentric nozzle structure.

Turning now to the claims, distinguishing differences between the claim language and the applied art will be specifically pointed out. Claim 36, as amended, recites in pertinent part: "A device comprising...a dispenser configured to release a chemical toward an edge bead; and a splash controller concentrically positioned at least partially around said dispenser...".

(Emphasis added). As described more fully above, the Iwata reference simply does not disclose this. Instead, Iwata states that it is "essential that the suction nozzle be so designed...to offset the cleaning liquid jetting outlet 5 from the longitudinal axis 7...". (Col. 2, lines 44-57). Accordingly, claim 36 is allowable over the cited reference. Claims depending from claim 36 are also allowable based upon the allowability of the base claim and further in view of the additional limitations recited in the dependent claims.

Claim 41, as amended, recites in pertinent part: "A device comprising...a dispenser configured to release a chemical toward an edge bead on a semiconductor substrate...and...a splash controller including a vacuum port, wherein the vacuum port is concentrically positioned about the dispenser...". (Emphasis added). Again, based on the foregoing discussion, Iwata does not disclose this. Claim 41 is therefore allowable over the Iwata reference. Claims depending from claim 41 are also allowable based upon the allowability of the base claim and further in view of the additional limitations recited in the dependent claims.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPEDITED PROCEDURE

Serial Number: 09/652,713

Filing Date: August 31, 2000

itle: CHEMICAL DISPENSING SYSTEM FOR SEMICONDUCTOR WAFER PROCESSING

Page 7 Dkt: 303.928US5

§103 Rejection of the Claims

Claim 40 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the Masahiko reference. Claims 38-41 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over the Iwata reference in view of Masahiko reference. Masahiko discloses a semiconductor inspection apparatus that is configured to position a probe, which may be electrical or mechanical, onto a surface feature of a semiconductor device. In order to effect contact between the probe and the surface feature, the apparatus is further configured to distribute a fluid onto the surface feature that dissolves an insulating film on the surface feature, and to remove the fluid from the surface before the surface probe is extended to contact the surface. With reference to Figure 1 in the Masahiko reference, it is readily seen that the probe 4 includes a probe pin 5 that extends from an outer tube 6. The outer tube 6 is coupled to a fluid reservoir 10 and a suction device 11 that permits the fluid to be applied to the surface, and also permits the fluid to be withdrawn from the surface through a switching valve 7.

Applicant therefore respectfully maintains that the Masahiko reference fails to disclose or fairly suggest a fluid dispensing apparatus having a splash controller concentrically positioned about the dispenser. Further, Applicant respectfully maintains that combining the of the Masahiko reference with the Iwata reference still fails to disclose or fairly suggest the various embodiments of the present invention. Accordingly, Applicant maintains that the rejections under 35 U.S.C.§103(a) should be removed.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 - EXPEDITED PROCEDURE

Serial Number: 09/652,713 Filing Date: August 31, 2000

Filing Date: August 31, 2000
Title: CHEMICAL DISPEN

CHEMICAL DISPENSING SYSTEM FOR SEMICONDUCTOR WAFER PROCESSING

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612) 349-9587 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

TRUNG T. DOAN

By his Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

P.O. Box 2938

Minneapolis, MN 55402

(612) 349-9587

Timothy B. Clise

Reg. No. 40,957

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS RCE, Commissioner for Patents, P.O. Box 1450, Alexendria, VA 22313-1450 on this day of September 2006.

NATE GANNON

Signature